AMENDMENTS

In the Claims:

1. (**Currently Amended**) A method comprising:

(a) **at a central fabrication station,** fabricating an addressable array of chemical moieties on a substrate;

(b) before the array is exposed to a sample, saving in a memory array related data which comprises instructions for selecting one or more machine readable algorithms for use by a processor on how to read an array or machine readable algorithms for use by a processor on how to process data from an array following reading of the array;

(c) shipping the fabricated array, and forwarding **an identifier associated with** the array related data to a user location remote from ~~where the array is fabricated~~ **said central fabrication station**; and

at said user location:

(d) in a processing unit of a user station:

(i) retrieving said array related data **associated with said identifier** from said memory **at said central fabrication station**; [[and]]

(ii) communicating the retrieved array related data to said user location remote from said central fabrication station; and

~~(ii)~~ **(iii)** automatically selecting one or more machine readable algorithms for how to read an array or machine readable algorithms for how to process data from an array following reading of the array based on said retrieved array related data;

wherein said method further comprises at least one of:

(e) reading said array according to an algorithm of said one or more automatically selected machine readable algorithms to obtain data; and

(f) processing data from reading said array based on said retrieved array related data to obtain a result.

2. (**Currently Amended**) A method comprising:

(a) **at a central fabrication station,** depositing chemical moieties onto different regions of a substrate so as to fabricate an array;

(b)   before the array is exposed to a sample, saving in a memory array related data which comprises instructions for selecting one or more machine readable algorithms for use by a processor on how to read an array or machine readable algorithms for use by a processor on how to process data from an array following reading of the array, which array related data is saved in association with an identifier so that the array related data can be retrieved from the memory using the identifier;

(c)   shipping the fabricated array, and forwarding **an identifier associated with** the array related data to a user location remote from ~~where the array is fabricated~~ **said central fabrication station**; and

at said user location:

(d)   in a processing unit of a user station:

(i)   retrieving said array related data **associated with said identifier** from said memory **at said central fabrication station**; [[and]]

(ii)   communicating the retrieved array related data to said user location remote from said central fabrication station; and

~~(ii)~~ **(iii)**   automatically selecting one or more machine readable algorithms for how to read an array or machine readable algorithms for how to process data from an array following reading of the array based on said retrieved array related data;

wherein said method further comprises at least one of:

(e)   reading said array according to an algorithm of said one or more automatically selected machine readable algorithms to obtain data; and

(f)   processing data from reading said array based on said retrieved array related data to obtain a result.

3.   (Canceled)

4.   (Previously Presented)   A method according to claim 2 wherein the chemical moieties are biopolymers.

5.   (Original)   A method according to claim 4 wherein the biopolymers are DNA.

6.   (Previously Presented)   A method according to claim 2 wherein the memory is a database, the method additionally comprising retrieving the array related data from the memory and communicating the retrieved data to location remote from the database in response to receiving a communication of the associated identifier from the remote location.

7.   (Previously Presented)   A method according to claim 2 wherein the memory comprises a portable storage medium, the method additionally comprising shipping the portable storage medium to a location remote from where the array is fabricated.

8.   (Original)   A method according to claim 7 wherein the portable storage medium is shipped to the same remote location as the array.

9.   (Previously Presented)   A method according to claim 6 additionally comprising applying a communication address to the substrate or a housing carrying the substrate, which communication address identifies a location from which the array related data will be communicated in response to a received communication of the identifier in association with which the array related data was saved.

10.   (**Currently Amended**)   A **method** comprising:

(a)   at a central fabrication station depositing biopolymers onto different regions of a substrate so as to fabricate multiple arrays;

(b)   before any of said fabricated multiple arrays have been exposed to a sample, saving in a memory array related data which comprises instructions for selecting one or more machine readable algorithms for use by a processor on how to read an array, or machine readable algorithms for use by a processor on how to process data from a read array following reading of the array, which array related data is saved in association with an identifier so that the array related data can be retrieved from the memory using the identifier;

(c)   applying the identifier to the substrate carrying an array or a housing carrying that substrate; and

(d)   shipping each of the fabricated arrays with applied identifier to one or more user locations each remote from the central fabrication station; and

~~(d)~~ **(e)**   in a processing unit of a user station at a user location:

(i)   retrieving said array related data **associated with the identifier** from said memory **at said central fabrication station**; [[and]]

(ii)   communicating the retrieved array related data to said user location remote from said central fabrication station; and

~~(ii)~~ **(iii)**   automatically selecting one or more machine readable algorithms for how to read an array or machine readable algorithms for how to process data from an array following reading of the array based on said retrieved array related data;

wherein said method further comprises at least one of:

~~(e)~~ **(f)**   reading said array according to an algorithm of said one or more automatically selected machine readable algorithms to obtain data; and

~~(f)~~ **(g)**   processing data from reading said array based on said retrieved array related data to obtain a result.

11.   (Previously Presented)   A method according to claim 10 wherein the biopolymers are polynucleotides.

12.   (Previously Presented)   A method according to claim 11 wherein the polynucleotides are DNA.

13.   (Previously Presented)   A method according to claim 10 wherein the memory is a database, the method additionally comprising retrieving array related data for arrays from the memory and communicating the data to locations remote from the database in response to receiving a communication of associated identifiers from the remote locations.

14.   (Previously Presented)   A method according to claim 10 wherein for each of multiple arrays the array related data and identifier for that array are saved

on a memory comprising a portable computer readable storage medium, the method additionally comprising shipping the portable storage mediums to multiple locations remote from the central fabrication station.

15. (Previously Presented) A method according to claim 14 wherein each of the portable storage mediums are shipped with the fabricated array for which the portable storage medium carries array related data and the identifier, to a same location remote from the central fabrication station from which a set of biopolymers used in fabricating that array was received.

16. (Previously Presented) A method according to claim 10 additionally comprising applying a same communication address to each of the substrates or housings carrying the substrates, which communication address identifies a location from which array related data will be communicated in response to a received communication of the identifier saved in association with the array related data.

17–44. (Canceled)

45. (Previously Presented) A method according to claim 1 wherein the array related data includes an indication as to whether a particular type of control probe is present on the array.

46. (Previously Presented) A method according to claim 2 wherein the array related data includes an indication as to whether a particular type of control probe is present on the array.

47. (**Currently Amended**) A method comprising:

(a) **at a central fabrication station,** depositing chemical moieties onto different regions of a substrate so as to fabricate an array;

(b) before the array is exposed to a sample, saving in a memory array related data which comprises instructions for selecting one or more machine readable instructions for controlling a scanner on how to read an array or machine

readable instructions for controlling a scanner on how to process data from an array following reading of the array;

(c)   shipping the fabricated array, and forwarding **an identifier associated with** the array related data to a user location remote from ~~where the array is fabricated~~ **said central fabrication station**; and

(d)   in a processing unit of said user station at said user location:

(i)   retrieving said array related data **associated with said identifier** from said memory **at said central fabrication station**; [[and]]

(ii)   communicating the retrieved array related data to said user location remote from said central fabrication station; and

~~(ii)~~ **(iii)**   automatically selecting one or more machine readable algorithms for how to read an array or machine readable algorithms for how to process data from an array following reading of the array based on said retrieved array related data;

wherein said method further comprises at least one of:

(e)   reading said array according to an algorithm of said one or more automatically selected machine readable algorithms to obtain data; and

(f)   processing data from reading said array based on said retrieved array related data to obtain a result.

48.   (**Currently Amended**)   A method of fabricating and using an addressable array of chemical moieties on a substrate, said method comprising:

(a)   **at a central fabrication station,** depositing chemical moieties onto different regions of a substrate so as to fabricate an array;

(b)   before the array is exposed to a sample, saving in a memory array related data which comprises instructions for selecting one or more machine readable instructions for controlling a scanner on how to read an array or machine readable instructions for controlling a scanner on how to process data from an array following reading of the array, which array related data is saved in association with an identifier so that the array related data can be retrieved from the memory using the identifier;

(c)   shipping the fabricated array, and forwarding **the identifier associated with** the array related data to a user location remote from ~~where the array is fabricated~~ **said central fabrication station**; and

(d)   in a processing unit of a station at said user location:

(i)   retrieving said array related data **associated with the identifier** from said memory **at said central fabrication station**; [[and]]

(ii)   communicating the retrieved array related data to said user location remote from said central fabrication station; and

~~(ii)~~ **(iii)**   automatically selecting one or more machine readable algorithms for how to read an array or machine readable algorithms for how to process data from an array following reading of the array based on said retrieved array related data;

wherein said method further comprises at least one of:

(e)   reading said array according to an algorithm of said one or more automatically selected machine readable algorithms to obtain data; and

(f)   processing data from reading said array based on said retrieved array related data to obtain a result.

49.   (Previously Presented)   A method according to claim 48 wherein the chemical moieties are biopolymers.

50.   (Previously Presented)   A method according to claim 49 wherein the biopolymers are DNA.

51.   (Previously Presented)   A method according to claim 48 wherein the memory is a database, the method additionally comprising retrieving the array related data from the memory and communicating the retrieved data to location remote from the database in response to receiving a communication of the associated identifier from the remote location.

52.   (Previously Presented)   A method according to claim 48 wherein the memory comprises a portable storage medium, the method additionally comprising

shipping the portable storage medium to a location remote from where the array is fabricated.

53.   (Previously Presented)   A method according to claim 52 wherein the portable storage medium is shipped to the same remote location as the array.

54.   (Previously Presented)   A method according to claim 51 additionally comprising applying a communication address to the substrate or a housing carrying the substrate, which communication address identifies a location from which the array related data will be communicated in response to a received communication of the identifier in association with which the array related data was saved.